

REMARKS

I. Overview

These remarks are set forth in response to the Non-Final Office Action mailed October 10, 2007. As this amendment has been timely filed within the three-month statutory period, neither an extension of time nor a fee is required. Presently, claims 1 through 16 are pending in the Patent Application. Claims 1, 7 and 13 are independent in nature. In the Non-Final Office Action, claims 8-12 and 16 have been objected for typographical errors which have been corrected herein. Further claims 7 through 12 have been rejected under 35 U.S.C. § 101. Finally, claims 1-16 have been rejected on cited art. Specifically, claims 1, 3, 4, 7, 9 and 10 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 7,117,153 to Mahajan et al. (Mahajan) in view of U.S. Patent No. 7,139,706 to Yuschik. Further, claims 2 and 8 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Mahajan and Yuschik and further in view of U.S. Patent Application Publication 2002/0173995 by Reich. Yet further, claims 5, 6, 11-13, 15 and 16 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Mahajan in view of Yuschik and further in view of U.S. Patent No. 6,275,797 to Randic. Finally, claim 14 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Mahajan in view of Yuschik and Randic and further in view of Reich.

II. The Applicant's Invention

The Applicant has invented a system, method and apparatus for evaluating the quality of voice input recognition by a voice portal. The invention works by collecting a set of grammars for one or more voice applications disposed in a voice portal and testing the ability of the voice portal to recognize a particular grammar from among the set of other grammars that may be

active with the particular grammar being tested. As such, a measure of quality of recognition can be derived for each grammar, thereby enabling the voice portal to be reconfigured to allow for better voice input recognition.

III. Rejections Under 35 U.S.C. § 101

On page 3 of the Non-Final Office Action, the Examiner asserted that the claimed invention, as recited in claims 7 through 12 are directed to non-statutory subject matter. This rejection is respectfully traversed. In *State Street Bank and Trust Company v. Signature Financial Group, Inc.*, 149 F.3d 1368, 47 USPQ2d 1596 (Fed Cir. 1998), the court set forth the criteria for establishing statutory subject matter under 35 U.S.C. § 101 as follows:

The question of whether a claim encompasses statutory subject matter should not focus on which of the four categories of subject matter a claim is directed to —process, machine, manufacture, or composition of matter—but rather on the essential characteristics of the subject matter, in particular, its practical utility. Section 101 specifies that statutory subject matter must also satisfy the other "conditions and requirements" of Title 35, including novelty, nonobviousness, and adequacy of disclosure and notice. *See In re Warmerdam*, 33 F.3d 1354, 1359, 31 USPQ2d 1754, 1757-58 (Fed. Cir. 1994). For purpose of our analysis, as noted above, claim 1 is directed to a machine programmed with the Hub and Spoke software and admittedly produces a "useful, concrete, and tangible result." *Alappat*, 33 F.3d at 1544, 31 USPQ2d at 1557. This renders it statutory subject matter, even if the useful result is expressed in numbers, such as price, profit, percentage, cost, or loss.

Thus, as articulated above, the test for determining whether subject matter is patentable under 35 U.S.C. § 101 involves deciding if the subject matter produces a "useful, concrete, and tangible result."

A discussion of the procedural considerations regarding a rejection based upon lack of utility (i.e., 35 U.S.C. § 101) is found in M.P.E.P. § 2107.02. Specifically, M.P.E.P. § 2107.02(1) states that:

regardless of the category of invention that is claimed (e.g., product or process), an applicant need only make one credible assertion of specific utility for the claimed invention to satisfy 35 U.S.C. 101 and 35 U.S.C. 112

In paragraph [0044] of Applicants' published Patent Application, it is stated that in the invention as claimed,

[0029] Once the test pattern is entered into the voice server 110, in step 240, a speech recognition engine in the voice server can be used to obtain an assessment of how well the voice portal recognized the test pattern. The quality of the recognition of the test and the current grammar being tested by the test input is therefore obtained. This quality of recognition can be monitored and collected by the results collector servlet 130 and stored in the measurements results database 150. The quality of recognition can include a set of statistics that are generally used to assess the quality.

The Applicant, therefore, has asserted a credible utility. As noted in M.P.E.P. § 2107.02(III)(A), the Court of Customs and Patent Appeals in *In re Langer* stated the following:

As a matter of Patent Office practice, a specification which contains a disclosure of utility which corresponds in scope to the subject matter sought to be patented must be taken as sufficient to satisfy the utility requirement of § 101 for the entire claimed subject matter unless there is a reason for one skilled in the art to question the objective truth of the statement of utility or its scope. (emphasis in original)

Since a credible utility is contained in Applicants' specification and expressed clearly and expressly in claims 7 through 12 as "A computer program product for evaluating the quality of voice input recognition by a voice portal", the utility requirement of 35 U.S.C. § 101 (i.e., whether the invention produces a useful, concrete, and tangible result) has been met.

Of note, the Examiner particularly objects to claims 12 through 15 because claims 12 through 15 recite a computer program product which the Examiner believes can be broadly interpreted to include "carrier-wave signal". Notwithstanding, Applicants can find no directive in the M.P.E.P. which renders an otherwise statutory claim into a non-statutory claim based upon the inclusion of a claim term that may relate to a propagation medium or a physical phenomenon of energy. In fact, M.P.E.P. 2106.01 is quite clear in setting forth an opposite proposition. Reproduced in part, M.P.E.P. 2106.01 states,

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component.... **When functional descriptive material is recorded on some computer-readable**

medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized.

Therefore, Applicants respectfully solicit withdrawal of the imposed rejection of claims 7 through 12 under 35 U.S.C. § 101.

IV. Rejections Under 35 U.S.C. §§ 102(c) and 103(a)

A. Characterization of the Cited Art

1. Mahajan

Mahajan teaches a method of modeling a speech recognition system. The method of Mahajan includes decoding a speech signal produced from a training text to produce a sequence of predicted speech units. The training text includes a sequence of actual speech units that is used with the sequence of predicted speech units to form a confusion model. The confusion model in turn can be used to decode a text to identify an error rate that would be expected if the speech recognition system decoded speech based on the text.

2. Yuschik

Yuschik, by comparison, teaches a system for designing a voice activated user interface having a semantic and syntactic structure adapted to the culture and conventions of spoken language for the intended users. The system of Yuschik poses to at least one respondent a hypothetical task to be performed. The system then asks each respondent for a word that the respondent would use to command the hypothetical task to be performed. Thereafter, the system receives from each respondent a command word. As a result, the system develops a list of

command words from the received command word and rejects the received command word, if the received command word is acoustically similar to another word in the list of command words.

3. Reich

Reich relates to a method for performing speech recognition. The method can include receiving user speech and determining a plurality of potential candidates. Each of the candidates can provide a textual interpretation of the speech. Confidence scores can be calculated for the candidates. The confidence scores can be compared to a predetermined threshold. Also, selected ones of the plurality of candidates can be presented to the user as alternative interpretations of the speech when none of the confidence scores is greater than the predetermined threshold. Finally, the selected ones of the plurality of candidates can have confidence scores above a predetermined minimum threshold, and thus can have confidence scores within a predetermined range.

B. Traversal of the Rejections on the Art

Applicant's originally filed independent claims require the extraction of a current grammar from a **voice portal**. On pages 10 and 11 of Applicants' Amendment dated August 6, 2007, Applicants argued,

As is well-known in the art and demonstrated by a simple Internet search, **the term voice portal generally refers to "a Web site or other service that a user can reach by telephone for information such as weather, sport scores, or stock quotes"** (from WhatIs.com), or "the voice equivalent of Web Portals, giving access to information through spoken commands and voice responses. Ideally a voice portal could be an access point for any type of information, services, or transactions found on the Internet" (from Wikipedia), or "the interface between a caller and an information source - it's the point of entry for a person using an IVR or speech recognition system. When augmented with VoiceXML, the voice portal can host a much wider variety of information, literally funneling any web-based data from your servers out to callers." (from Call Center Magazine, January 29, 2001).

Exemplary claim 1 recites as follows:

1. A method of evaluating the quality of voice input recognition by a voice portal, said method comprising the steps of:
 - extracting a current grammar from the voice portal;
 - generating a test input for the current grammar, the test input including a test pattern and a set of active grammars for the current grammar;
 - providing the test input to the voice portal;
 - analyzing the test pattern with respect to the set of active grammars with a speech recognition engine in the voice portal; and
 - deriving a measure of quality of recognition for the current grammar.

Thus, as originally filed, claim 1 (and through similar language, claims 7 and 13) require the presence of an interaction with a voice portal. Yet, the notion of a voice portal is wholly absent within all cited references---especially Mahajan. Applicants noted as much in the Amendment of August 6, 2007. Yet, the Examiner dismissed Applicants' arguments as "moot in view of the new ground(s) of rejection."

Notwithstanding, there is nothing "new" about Examiner's grounds of rejection. The Examiner has recited the IDENTICAL grounds of rejection in respect to Figure 3, Column 5, Line 11 of Mahajan in support of the flawed contention that Mahajan references a "voice portal". Yet, the Applicants took great lengths to explain to Examiner with extrinsic evidence the meaning of "voice portal" as understood by the skilled artisan. That Examiner chooses not to respond to Applicants' arguments and explanations and then with great audacity recites the same foundation for an identical rejection is not acceptable under patent practice in the United States Patent and Trademark Office. Consequently, the Applicants now respectfully INSIST the withdrawal of all rejections based upon the Mahajan reference because Mahajan fails to teach or suggest a voice portal as is well understood by the skilled artisan.

V. Conclusion

The Applicants respectfully request the withdrawal of the rejections under 35 U.S.C. §§ 101 and 103(a) owing to the clearly distinctive nature of a "voice portal" as recited in the claims and the content of the foregoing remarks. The Applicants request that the Examiner call the undersigned if clarification is needed on any matter within this Amendment, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

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